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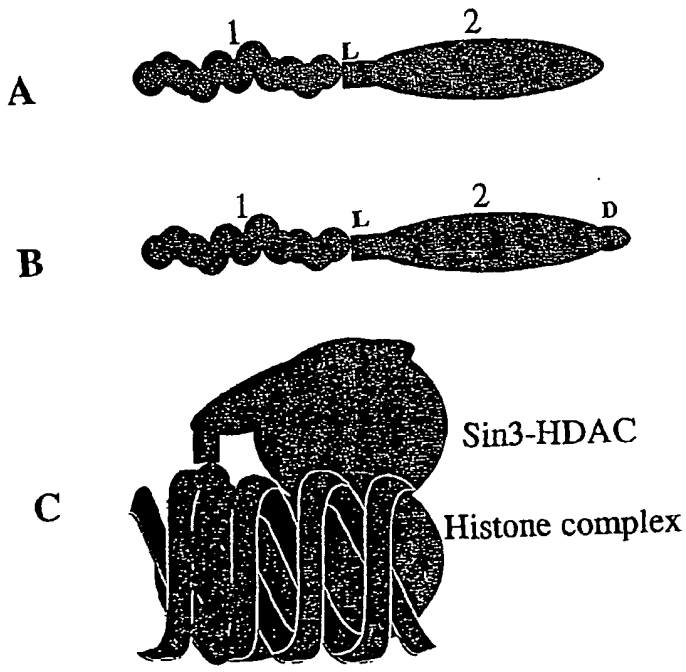
[Continued on next page]

(54) Title: CONTROL OF APOPTOSIS USING A COMPLEX OF AN OLIGONUCLEOTIDE AND A REGULATORY PEPTIDE



(57) Abstract: A method for suppressing the expression of a selected apoptosis-related gene in a cell the method comprising introducing into the cell a molecule comprising (1) a nucleic acid binding portion which binds to a site at or associated with the selected gene which site is present in a genome and (2) a modifying portion, wherein the nucleic acid binding portion comprises an oligonucleotide or oligonucleotide mimic or analogue, and wherein the repressor portion comprises a polypeptide or peptidomimetic. Molecules for use in the methods of the invention are provided. The repressor or modifying portion may be a portion of a histone deacetylase or DNA methylase or polypeptide capable of recruiting a histone deacetylase or DNA methylase. The nucleic acid binding portion may be a triplex forming oligonucleotide (TFO). The apoptosis-related gene may be Bcl-2. The methods and molecules may be useful in the treatment of cancer.

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European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

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INTERNATIONAL SEARCH REPORT

International Application No
GB 03/05321

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N15/63 C12N15/11 C12N5/10 C07K14/47 A61K38/17
A01K67/027 A01H5/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data, PAJ, BIOSIS, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 03/033701 A (PUFONG BORIS TUMI ; ALI SIMAK (GB); BULUWELA LAKI (GB); KANDA PATRICK) 24 April 2003 (2003-04-24) examples 1-13	1-47
P,X	WO 03/010308 A (ALI SIMAK ; HOLMES DAVID (GB); WAXMAN JONATHAN (GB); BULUWELA LAKJAYA) 6 February 2003 (2003-02-06) examples 1-6	1-47
X	WO 01/83793 A (SANGAMO BIOSCIENCES INC) 8 November 2001 (2001-11-08) page 17, line 10 - line 17 page 21, line 17 - line 18 page 31, line 11 - line 20 page 32, line 1 - line 5 page 32, line 23 - line 26 page 35, line 26 - line 27	1-47

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
16 August 2004	13/09/2004

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax (+31-70) 340-3016	Guarinos Viñals, E

INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/26960 A (SANGAMO BIOSCIENCES INC) 4 April 2002 (2002-04-04) page 25, line 32 - page 26, line 8 page 29, line 1 - line 15 page 31, line 10 - line 14 page 31, line 24 - line 26; example 4	1-14, 18-47
Y		15-17
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB 03/05321

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. [X] Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 29 and 46 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

2. [ ] Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. [ ] Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. [ ] As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. [ ] As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. [ ] As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. [ ] No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

[ ] The additional search fees were accompanied by the applicant's protest.

[ ] No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No
GB 03/05321

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